

### REMARKS

Applicants acknowledge receipt of an Office Action dated January 17, 2007. In this response, Applicants have amended claims 1-8. Support for these amendments may be found in, for example, figures 4, 6, and 8 and in the Specification, *inter alia*, in the fourth and fifth full paragraphs on page 7, the first three paragraphs on page 8, and in the first full paragraph on page 16. Following entry of these amendments, claims 1-8 are pending in the application.

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

#### **Rejection Under 35 U.S.C. §112, 2<sup>nd</sup> Paragraph**

On page 2 of the Office Action, the PTO has rejected claims 2, 4-6, and 8 under 35 U.S.C. §112, 2<sup>nd</sup> paragraph as allegedly being indefinite. Applicants respectfully traverse these rejections.

With respect to the use of the term "substantial voltage" in claim 2, Applicants have amended claim 2 in a manner which obviates the issue raised by the PTO.

With respect to the use of the term "clogging" in claims 4-6, Applicants have amended these claims in a manner which obviates the issues raised by the PTO. Also, Applicants wish to direct the PTO's attention to the Specification including, *inter alia*, the first three paragraphs on page 8 which discuss clogging.

With respect to the use of the term "low" in claim 7, Applicants have amended claim 7 to delete the term "low" thereby obviating the issue raised by the PTO.

With respect to the use of the phrases "predetermined value" and "predetermined range" in claim 8, Applicants have amended the claims in a manner which they believe obviates the issue raised by the PTO. With respect to the references to the use of the term "predetermined" in the currently pending claims, Applicants wish to direct the PTO's attention to the flow charts in figures 4, 6, and 8, and the references to "predetermined" values in the specification including, for example, page 9, lines 13-16.

Following entry of these amendments, claims 2, 4-6, and 8 remain at least as broad in scope as in their original form.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection under §112.

### **Rejection Under 35 U.S.C. §102**

On page 4 of the Office Action, the PTO has rejected claim 1 under 35 U.S.C. §102(b) as allegedly being anticipated by JP 2003-115314 to Akahori (hereafter "Akahori"). Applicants respectfully traverse this rejection for at least the reason set forth below.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See generally MPEP §2131.

Here, Applicants submit that Akahori fails to disclose "a variable flow rate circulation pump for circulating the gas through the circulation flow path, which is operative to adjust a flow rate of the gas in the circulation flow path" as recited in claim 1. Applicants acknowledge the PTO's reference to Akahori's ejector (208) but note that while the flow rate of fluid through the ejector may be varied depending on the opening and closing of the purge valve (206), the ejector itself is not operative to adjust the flow rate.

For at least this reason, Applicants submit that the outstanding rejection is improper and ought to be withdrawn.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection under §102.

### **Rejection Under 35 U.S.C. §103**

On page 4 of the Office Action, the PTO has rejected claims 2-3 under 35 U.S.C. §103(a) as allegedly being unpatentable over Akahori. In addition, on page 5 of the Office Action, the PTO has rejected claims 7-8 under 35 U.S.C. §103(a) as allegedly being unpatentable over Akahori in view of U.S. Patent 6,960,401 to Barton *et al.* (hereafter "Barton"). Applicants respectfully traverse these rejections for at least the reasons set forth below.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success.

Finally, prior art references must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Here, Applicants submit that Akahori and Barton, whether taken individually or in combination, fail to teach or suggest "a variable flow rate circulation pump for circulating the gas through the circulation flow path, which is operative to adjust a flow rate of the gas in the circulation flow path" as recited in independent claim 1 or a step of "controlling the variable flow rate circulation pump to increase flow rate of the fuel gas in the fuel gas circulation system, if some of the monitored output voltages are out of a predetermined range which includes an average value of the output voltages of the respective fuel cells" as recited in independent claim 8. As discussed above, Akahori's ejector (208) is not a pump, and Barton adds nothing to resolve this deficiency. For this reason, the combination of Akahori and Barton cannot properly render independent claim 1 obvious within the meaning of §103.

If an independent claim is nonobvious under §103, then any claim depending therefrom is nonobvious. *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988). See MPEP 2143.03. Thus, Applicants submit that claims 2-3 and 7, which ultimately depend from independent Claim 1, are also non-obvious.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections under §103.

### CONCLUSION

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.


The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to

charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date April 17, 2007

By  \_\_\_\_\_

FOLEY & LARDNER LLP  
Customer Number: 22428  
Telephone: (202) 672-5540  
Facsimile: (202) 672-5399

Glenn Law  
Attorney for Applicant  
Registration No. 34,371

Paul D. Strain  
Attorney for Applicant  
Registration No. 47,369